

**AIR-BUBBLE-MONITORING MEDICATION ASSEMBLY,
MEDICAL SYSTEM AND METHOD**

ABSTRACT

An air-bubble-monitoring medication assembly includes a drug infusion subassembly having a tube for administering therein a liquid to a patient, a bubble-size determinator which is positioned to sense an air bubble entrained in the liquid in the tube and which determines the volume of the air bubble, and an analyzer. The analyzer logs the time the detector senses an air bubble and the volume of the air bubble, calculates a running sum of a total air volume of all air bubbles sensed over a time interval, compares the running sum with a preselected limit, and generates an output when the running sum exceeds the preselected limit. The medical system additionally includes a controller assembly which determines a delivery schedule for administering the liquid and which controls the drug infusion subassembly to administer the liquid in accordance with the determined delivery schedule. The method performs the analyzer functions.